Standards of Public Land Health
Evaluation of 64020 ROCK HOUSE RANCH Allotment
[12/05/2006]

The Roswell Field Office conducted Rangeland Health Assessments at 5 study sites within Rock House Ranch, allotment #64020 on March 22, 2007. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and used in support of these field assessments. A summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64020-BAJILLO-E149	X			X			N/A		
64020-HOUSE-E151	X			X			N/A		
64020-NORTH-E150	X			X			N/A		
64020-SOUTH-E148	X			X			N/A		
64020-WEST-E147	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Rock House Ranch, allotment #64020. Ten of these assessed soil site stability, 11 hydrologic function, and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 5 trend plot locations within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections, which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years.

There are 5 sites on this allotment. All were visited on 3/22/07. Three of the sites are located within the Shallow SD-3 ecosite. One is within the Limestone Hills SD-3 ecosite, and one is within a Loamy CP-2 ecosite. The ecosite description of the Shallow SD-3 did not fit very well with conditions found on the ground for the three sites. Existing soil and vegetative conditions fit more closely with a Very Shallow CP-4 or a Limestone Hills SD-3. For the Shallow SD-3 sites, bare ground was much less than expected.

All sites showed relatively high soil stability with good vegetative cover. Most indicators rated none to slight or slight to moderate. Only two indicators rated moderate at the Bajillo - E149 study site relating to invasive plants and physical and biotic crusts. Most sites, except House, had high amounts of surface rock. Rills, blowouts, gullies are only associated with cultural features. Most of the major drainages showed evidence of active gully formation due to roads or other cultural features. Otherwise, site stability is satisfactory in all cases. The area around North Well is particularly note worthy. The active gully there is threatening the road. There is active cutting in Eddleman Draw near West -E147.

The only Loamy site is at House-E151. This area has been used by cattle as a loafing area. The few clumps of yucca serve as wind breaks. This area has inclusions of a rockier site, but the loamy areas are heavily dominated by Tobosa grass. Loamy areas throughout the allotment are dominated by Tobosa grass.

Annual production was higher than the average expected for the respective ecosites. Functional / Structural Groups is an indicator than typically rated slight to moderate due to a shift in vegetative composition and/or an apparent increase in the shrub component. Grama grasses (blue grama and black grama) are no longer the dominant grasses. Invasive plants are not a significant issue at this time; however, there is an apparent increase in mesquite in some of the bottom areas near drainages throughout the allotment as indicated on three of the study sites. Cholla have increased in some areas, but many appear to be dying due to a fungal infection.

On the way in to the allotment, we observed a significant overland flow event due to a heavy rain and hail storm. Surface rock and shallow soils help prevent soil loss from such events. Significant runoff occurrences are more a function of geology than a decline vegetative condition.

The allotment provides good habitat for mule deer. We observed two groups of deer on the allotment. Site North-E150 had abundant deer sign.

It is the professional opinion of the Assessment Team, public land within allotment #64020, Rock House Ranch meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

Recommendations: All of the loamy areas within the allotment are dominated by tobosa grass with a noticeable reduction in other more desirable grasses. Prescribed burning or other disturbance (i.e. herd effect) followed by appropriate rest may help improve vegetative diversity.

Active erosion areas are associated with features such as roads, stock tanks and wells. Roads passing through the allotment have resulted in accelerated runoff into local drainages. There is active head cutting occurring. All the roads within this allotment should be evaluated for this condition and corrective measures taken.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64020-BAJILLO-E149			
Legal Land Desc	NENE 35 0070S 0220E Meridian 23	Acreage	2838
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060005080 MACHO		
Observers	JACKSON; BRITTON	Observation Date	03/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EbC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM,D		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	No current livestock use observed. A road passes through the site.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:	Lots of surface rock.					
S H	Water Flow Patterns				X	
Comments:	Flow patterns are stable and short.					
S H	Pedestals and/or Terracettes				X	
Comments:	No terracettes. Active pedestalling is rare. Some has occurred in flow patterns.					
S H	Bare Ground					X
Comments:	Site has much less bare ground than expected in ESD.					
S H	Gullies					X
Comments:						

S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Some litter movement occurring, but it is very limited.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:	Relatively low organic matter in surface layer.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Good grass diversity. Shrubs may be increasing. Mesquite is starting encroach.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	There is some displacement, but it is minimal.					
B	Annual Production				X	
Comments:	Higher than average production, but not 80% of potential.					
B	Invasive Plants			X		
Comments:	Mesquites are scattered throughout the site.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Scattered. Not continuous.					
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations				X	
Comments:						

B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	1	6	6

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are stable throughout the site. There is a lot of surface rock. Some soil loss has occurred, but it is minimal.	0	0	10
Hydrologic		0	0	11
Biotic	All indicators, except one, are either "slight to moderate" or "none to slight". Invasives rate "moderate" due to an apparent increase in mesquite, which are scattered throughout the site.	0	1	12

Site Notes: There was a heavy rain storm (rain and hail) that had just occurred along the route to the site this morning. Heavy overland flow resulted.

Plants species encountered included: TRPI; BOER; BOGR2; SCBR; BOCU; PRGL; MIMOSA sp.; OPUNT (pricklypear); GUSA2; YUCCA; NOLINA; ERIOG; ARIST; MUSQ; STNE; SOHE (nightshade).

Site does not fit well with the ESD 04CY025 SHALLOW. Seems to fit better with Limestone Hills or Very Shallow.

The site has lots of surface rock and soils are stable. Active pedestalling is rare. There is fairly good species diversity, but Tridens spp and three awns are higher in the composition than desirable.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64020-HOUSE-E151

Legal Land Desc	SESE 28 0070S 0220E Meridian 23	Acreage	1688
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	JACKSON; BRITTON	Observation Date	03/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	HDA	Soil Taxon Name	HODGINS
Texture Class	NM644 SIL	Soil Phase	HODGINS-RANSTEIN
Texture Modifier	NM644 SILT LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	The site is within a loafing area. The clumps of yucca have been used as wind breaks.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						

S H	Pedestals and/or Terracettes					X
Comments:	Site is more of deposition area.					
S H	Bare Ground					X
Comments:	Very little bare ground.					
S H	Gullies				X	
Comments:	There is one large gully in Rock House Canyon which has some active cutting and is stabilizing at the same time. This draw bisects the site area, but is north of the plot. The active cutting is more obvious further upstream.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	High aggregate stability.					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Trending toward moderate. Species diversity is limited. Tobosa grass dominates the loamy areas.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:	Exceeds 80% of potential.					
B	Invasive Plants				X	
Comments:	Cholla has encroached, but are looking sickly.					
B	Reproductive Capability of Perennial Plants					X

Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	3	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	This a relatively flat area. With the exception of the area along Rock House Canyon, soils are stable and well vegetated.	0	0	10
Hydrologic		0	0	11
Biotic	Species diversity has declined especially in the loamy	0	0	13

	areas which are dominated by Tobosa grass. There is some encroachment of cholla. Production is high. Litter amounts are high.			

Site Notes: Study site is on private land according to GIS. Site has only one transect. Rock House Canyon bisects the site but is north of the study plot. Cattle have used this area as a loafing area. The gullying observed in Rock House Canyon appears to be the result of excellerated runoff from an upstream stock tank.

The area includes two ecosites, a loamy site (R070BY052) with inclusions of a more rocky site. The area with more surface cobble has a greater species diversity but less dense growth and lower production.

Species encountered included: HIMU; GUSA2; MUTO; YUCCA; BOCU; dwarf desert holly; cholla; CIRCIUM spp.; ARIST; locoweed.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64020-NORTH-E150

Legal Land Desc	NWSE 14 0070S 0220E Meridian 23	Acreage	1815
Ecosite	042CY020NM LIMESTONE HILLS SD	Photo Taken	Y
Watershed	13060005080 MACHO		
Observers	JACKSON; BRITTON	Observation Date	03/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	ESD	Soil Taxon Name	ECTOR
Texture Class	NM644 CBX-L	Soil Phase	ECTOR-ROC
Texture Modifier	NM644 EXTREMELY COBBLY L		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	There has been some cattle use in the area. Mule deer use is evident throughout the site. A road that doesn't show on the map passes through the site.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas

Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:	No terracettes. Almost no pedestalling on slope areas. There is some pedestalling at the toe of the slope and gravelly bottom areas.					
S H	Bare Ground					X
Comments:	Lots of surface rock.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:	There is some reduction in soil surface stability in the plant / rock interspaces. This is more evident on the flatter areas of the site.					
S H B	Soil Surface Loss or Degradation					X
Comments:	Trending toward slight to moderate particularly at the toe of the slope and bottom areas.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Shrub component may be increasing, particularly on the bottom areas of the site.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	

Comments:	As expected for the site.					
B	Annual Production					X
Comments:						
B	Invasive Plants				X	
Comments:	Mesquites appear to be encroaching on the bottom, gravelly areas.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	The absence of biotic crusts does not appear to be a function of current management. The site looks good.					
B	Wildlife Habitat					X
Comments:	Good mule deer habitat as evidenced by the amount of deer sign in the area.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	2	8
H	Hydrologic	0	0	0	2	9
B	Biotic	0	0	0	5	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are stable. The bottom areas of the site show some evidence of soil movement.	0	0	10
Hydrologic		0	0	11
Biotic	There is good plant species diversity. Shrubs may be increasing particularly on the bottom areas of the site.	0	0	13

Site Notes: This site matches very well with the ESD. Grazing use was light with the exception of heavy use on an unknown cool season grass (probably STNE). Deer may be using this grass. No seed heads could be found and there was abundant deer sign in the area. Cattle use was evident, but it was more noticeable on the flatter slopes and bottom areas. There was some use noted on sideoats grama which was greening up at the time of this visit.

Creosote bush was common on the gravelly, bottom areas.

Plant species encountered included: GUSA2; NOLINA; MICA (catclaw); RHMI3 (littleleaf sumac); OPUNT (prickly pear); BOGR2; BOER; ARIST; ERIN; (unk palatable cool season grass); PAHA; HIJA; BOCU; SPCR; LATR.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64020-SOUTH-E148

Legal Land Desc	NWSW 33 0070S 0220E Meridian 23	Acreage	1960
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	JACKSON; BRITTON	Observation Date	03/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EbC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM,D		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01

Disturbances and Animal Use:	No livestock use was evident on the site. A two track road passes through the site.

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Minor evidence of erosion. Flow patterns are stable and short.					
S H	Pedestals and/or Terracettes				X	
Comments:	No terracettes. There is some, albeit minor, pedesalling associated with flow patterns.					
S H	Bare Ground					X
Comments:	Lots of surface cobble. Doesn't fit well with ESD.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	There is some litter displacement, but it is minimal.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Surface aggregate stability is moderate.					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	There is a higher shrub component than expected.					

B	Plant Mortality/Decadence					X
Comments:	Snake weed is dying.					
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:	Good production. Exceeds 80% of potential.					
B	Invasive Plants					X
Comments:	There are a few scattered cholla.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Crusts are evident throughout the site but are not continuous.					
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	4	7
B	Biotic	0	0	0	3	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should

most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are stable on the site. There is some pedestalling, but it is minimal. Water flow patterns are stable and short. Litter movement is evident within the flow patterns.	0	0	10
Hydrologic		0	0	11
Biotic	There is good production. Plant species diversity may somewhat less than expected for the site. Shrubs may be increasing on the site.	0	0	13

Site Notes: This site does not appear to fit well with the Shallow ESD. Very Shallow or Limestone Hills may be a better fit. The site was productive and stable.

Plant species encountered included: MUSQ; LYPH; MUTO; BOGR2; globemallow; ERIOG; GUSA2; ARIST; NOLINA; MIAC (catclaw); BOER; TRPI; SPCR; PLPA2 (wooly plantain); OPUNT (cholla); LATR; misc. cactii; Artemisia spp.; pencil cholla; Indigo bush.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64020-WEST-E147

Legal Land Desc	SWSW 10 0070S 0220E Meridian 23	Acreage	1922
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060005080 MACHO		
Observers	JACKSON; BRITTON	Observation Date	03/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EbC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM,D		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual	9.73	NOAA Avg Growing Season	8.01

Precipitation		Precipitation	
Disturbances and Animal Use:	No evidence of current livestock use. An old road passes through the site.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:	No rills present.					
S H	Water Flow Patterns				X	
Comments:	A few small channels developing, but mostly short or broken by rock.					
S H	Pedestals and/or Terracettes				X	
Comments:	No terracettes. Pedestals are few. Active pedestalling is uncommon.					
S H	Bare Ground					X
Comments:	Site more closely fits the numbers for Limestone Hills, particularly the study plots and transects.					
S H	Gullies					X
Comments:	No gullies on site. However, very active head cutting occurs in proximity to North Tank.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Some litter is being displaced. Minimal.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	The site is well armored with rock. There has been some soil loss in plant/rock interspaces.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	It is minimal at the study plot location, but is more evident on adjacent bottom lands.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						

S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Borderline with none to slight. There has been a shift in species composition. Black grama is not dominant. There is relatively good species diversity.					
B	Plant Mortality/Decadence					X
Comments:	Snake weed is dying.					
H B	Litter Amount				X	
Comments:	As expected for the site.					
B	Annual Production					X
Comments:	Good production.					
B	Invasive Plants					X
Comments:	Rarely present.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Evident throughout the site but not continuous.					
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:						
B	Special Status Species Populations					X
Comments:						

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5

H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	0	5	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	There is some evident of soil movement and soil loss. The amount of surface rock lends stability to the site. The bottom more loamy areas within the site show a little more instability.	0	0	10
Hydrologic		0	0	11
Biotic	Biotic crusts are not continous. Plant species diversity is relatively good, but there appears to be a shift in plant composition. Production is good.	0	0	13

Site Notes: The trend plot and radiating transects do not appear to be on the Shallow site based on the ESD. This site more closely fits with Limestone Hills or perhaps Very Shallow.

There are no major gullies on the site, however, there is one at North Well and one along Eddleman draw. They are both active and threaten the existing roads.

Plant species encountered at the site include: ARIST; SPCR; TRPI; BOER; NOLINA; GUSA2; LATR; ERIOG; PRGL; OPUNT (prickly pear); OPUNT (cholla); MUSQ; BOCU; YUCCA; ADENO5 (dogweed); Sphaeralcea spp. (globemallow); hedgehog cactus; MIAC (catclaw); ERIN; BOGR2.

Determination of Public Land (Rangeland) Health for 64020 ROCK HOUSE RANCH

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Rock House Ranch, allotment #64020, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ EDDIE BATESON	08/24/2007
Assistant Field Manager	Date